



# **AgNIC: a Model for a National Digital Library for Agriculture – *Building Collaborative Partnerships Through Technology to Meet Global Needs for Agricultural Information***

Melanie Gardner, AgNIC Coordinator

National Agricultural Library

October 9, 2006

USAID October 2006

# AgNIC



- Alliance of partners with common goals –
  - Offer quick and reliable access to quality information in the agricultural sciences and related fields
  - Operate by consensus
  - Voluntary
  - “Standards”-based

# AgNIC Technology

- Technology is catching up to our ideas!
- Moving to “Service Oriented Architecture” – which means connecting multiple remote repositories of information using technology standards
- HTML to XML
- Role of standards
  - Services such as SOAP, REST, RMI, etc.
  - Metadata
  - Vocabulary
  - Digital imaging/Preservation
  - OAI for harvesting from “trusted sources”

# AgNIC Services

- CURRENT

- Browse by topic –
  - dependent on standardized vocabulary and Web Services
- Calendar RSS –
  - dependent on RSS standard
- News RSS –
  - standard
- Resources –
  - Metadata
  - Vocabulary
  - RSS or Web Service
  - Database structure

- FUTURE

- Offer “services” through “true portal” with SOA as both “provider” and “consumer”

# AgNIC and the NDLA

- Serves as a suitable model for establishing the kinds of partnerships necessary for the NDLA
- Moving to standards-based functionality – AgNIC began before many of these standards were finalized!
- Work with a variety of partnership models

# Exploring Opportunities



- Reinventing AgNIC Technology – to provide and consume services
- Harvesting
- Cross searching
- Metadata
- Repositories

# Harvesting

- Harvest other institution's records – standards are very important!
  - University of Minnesota
  - SIDALC
  - American Farmland Trust
  - Michigan State University KR
- Issues?
  - “live” harvest load on systems
  - Control of the search query
  - Establishing protocols & schedules
  - Technologies may not be compatible

# Exploring Cross Searching

- Standards are essential!
  - IFPRI Virtual Library
  - SIDALC Agri2000
  - NAL databases such as Food Safety Research Database
- Issues?
  - Technology is not dependable
    - System outages
    - Slow connections
  - Controlling the query



# Metadata

- General issues with metadata
  - Inconsistencies
  - Keeping to standards
  - Generating cross-walks
- International Project to translate metadata from USDA publication series – USDA Home and Garden Publication series
  - Historical – over 50 years
  - Full-text, digitized collection
  - Couple thousand titles
- Issues?
  - Huge project
  - Time consuming
  - Multi-lingual issues
  - Character encoding – UTF8 vs UTF16 vs. ASCII

# Repositories

- Establish a way to house “cast-off” full-text collections
- Issues?
  - AgNIC role is ...?
  - Keeping up with current technology
  - Today’s solution ... tomorrow’s problem?

# AgNIC Technology - supporting the vision

Questions? Comments?

Melanie Gardner, AgNIC Coordinator – [mgardner@nal.usda.gov](mailto:mgardner@nal.usda.gov)

Vernon Chapman, AgNIC IT – [vchapman@nal.usda.gov](mailto:vchapman@nal.usda.gov)

USAIN October 2006